

Questions and Issues using the RHEL6 Singularity Container

Problem running datacat: (Tyrel)

Logged in on a centos7 machine, datacat (/afs/slac/g/glast/ground/bin/datacat) did not work within the container or with "singularity exec -B ...", I got the following errors:

```
/afs/slac/g/glast/ground/bin/datacat: line 2: /u/gl/glast/oracle/bin/setup-11gr2-j7.sh: No such file or directory
/afs/slac/g/glast/ground/bin/datacat: line 8: /bin/java: No such file or directory
```

I was able to run this from the machine itself and not using the container, so it may be a non-issue

Need help modifying script to submit jobs to the farm: (Tyrel)

I'm trying to modify a script which submits jobs to the farm but relies on things which don't work on the centos7 machines. In the script I have the bsub command, which works fine on the rhel6-64 machines (done in a loop over i and with two inputs):

```
bsub -q long -W 20:00 -R rhel60 -o $PWD/gengcrhist_mod_$2_$i.output.txt genGCRHists -m ../fit_protonCalib_calibOps_new_46runs.calMPD.txt -a ..
/fit_gcrhist_240m_244m_bigsum.gcr_asym_hist.txt ../digitization-v4r0p2_077016861_digi_DIGI01.FLIGHT_GAIN.cidac2adc.txt digi_$2_$i.txt gcr_$2_$i.
txt gcrhist_mod_$2_$i
```

When I try to update it to use the container as I understand it, I change it to the following:

```
bsub -q long -W 20:00 -R centos7 -o $PWD/gengcrhist_mod_$2_$i.output.txt singularity exec -B /nfs:/nfs -B /afs:/afs -B /gpfs:/gpfs $myimage
genGCRHists -m ../fit_protonCalib_calibOps_new_46runs.calMPD.txt -a ../fit_gcrhist_240m_244m_bigsum.gcr_asym_hist.txt ../digitization-
v4r0p2_077016861_digi_DIGI01.FLIGHT_GAIN.cidac2adc.txt digi_$2_$i.txt gcr_$2_$i.txt gcrhist_mod_$2_$i
```

At first pass, this does not seem to retain any of my environment so it cannot find the genGCRHists executable. I tried explicitly sourcing the script before the command and that did not work

(There was more here about libraries in an earlier version, but I traced that down to an error when I had begun making changes to switch to rhel7 before learning that things would not be built for rhel7 and I needed to use this container).

Currently the solution I found was to have my script write a script for each batch job I want to run. The commands in that script are just to source the setup script, and then run the genGCRHists command. The bsub command uses the "singularity exec..." command to run the new script for each job

Am I using the container incorrectly with the bsub command? It seems that using the "singularity exec..." requires setting up the environment again, is this correct?
